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A Systematic Review of the Impact of Treatment of Depression on ART Adherence in Patients with HIV

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Introduction

Depression, being the most common comorbid psychiatric condition with HIV, poses a large barrier to treatment adherence with antiretroviral (ART) adherence. Studies show that higher depressive symptoms generally are associated with poorer adherence. Depressed individuals are less likely to initiate and maintain treatment resulting in poorer clinical outcomes. These include higher viral loads and lower CD4+ counts, which in the management of HIV can be life threatening.

This relationship is believed to be moderated in part by socioeconomic and cultural factors. It also is a result of reduced motivation towards health, cognitive symptoms, hopelessness and social isolation that comes with depression.

While this is a complex issue that has been well identified by clinical experts and within the literature, few studies have directly examined the approach necessary to amplify ART adherence among HIV patients suffering with depression.

Methods

Observational and experimental studies looking at North American adults were sourced from Pubmed and Medline. The treatment populations are those with known HIV/AIDS and depression (defined by DSM diagnosis or on depression scales). Depression treatments were categorized by pharmacotherapy and psychotherapy interventions. Only studies with ART adherence as a primary or secondary outcome were included.

Results

Please see table below for selected ten studies. Overall mixed results in terms of improving adherence with treatment with antidepressants. The most sustained effect was demonstrated with cognitive behavioral therapy specialized for adherence optimization (Life Steps CBT-AD)

Discussion

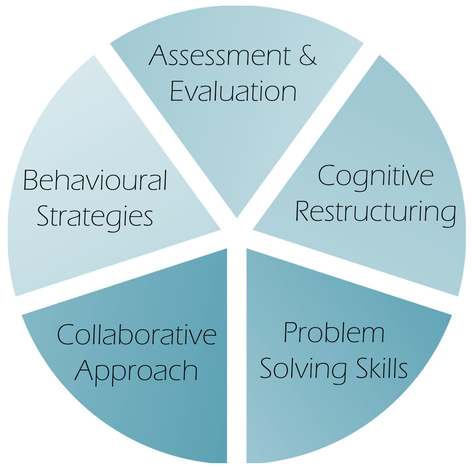
While there is a general improvement with treatment of depression, the scope of research on this topic is narrow and the quality of some studies is weak with only a few randomized trials looking at this relationship.

Retrospective studies appear to more readily demonstrate a correlation between depression treatment and improved adherence, but prospective trials fail to recreate this relationship in a consistent way. The strongest adherence improvements were observed when participants had moderate to severe depression at baseline and were given long term individualized treatment

Consistent limitations include short term follow up, biases from self report and low statistical power due to small sample size. Some of the populations were very specific and generalizability was further limited by exclusion of concurrent substance use disorder.

Pharmacotherapy			Psychotherapy		
Tsai et al. (2013)	Directly observed treatment (fluoxetine) vs. routine care.	**No change in Adherence ↓Depressive Sx**	*Himelhoch et al. (2013)*	11 sessions of CBT, telephone vs face to face.	**↑Adherence**
Akincigil et al. (2011)	Depression treatment with antidepressants and or psychotherapy, measured by insurance claims	**↑Adherence**	*Safren et al. (2009)*	10-12 sessions of CBT-AD vs. enhanced treatment as usual	**↑Adherence**
Cruess et al. (2012)	Depression scores and presence of depression treatment vs. not	**↑Adherence**	*Safren et al. (2016)*	12 sessions of either CBT-AD or IPS-AD vs. enhanced treatment as usual	**↑Adherence**
Hoberg et al. (2008)	Depressed vs non depressed SSRI use vs none	**↑Adherence**	*Tull et al. (2018)*	Single 1hr behavioural activation session	**No change in Adherence**
Pence et al. (2015)	Systematized depression care management with antidepressants vs usual care	**No change in Adherence ↓Depressive Sx**	*Simoni et al (2013)*	CBT-AD compared to treatment as usual	**↑Adherence**

Life Steps Intervention for HIV Medication Adherence:



Conclusion

This review reiterates the significance of depression as the most common psychiatric comorbidity among people living with HIV. Early identification and treatment of depression can convey benefits to maintaining physical health, longevity and quality of life. Integration of physical and mental health care is paramount to establishing and maintaining good overall health in this population and requires a tailored and specialized approach.

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